



NTC Characteristic Values

| Parameter | Symbol | Conditions | | | | Value | | | Unit |
|----------------------------|----------------|------------------------|--------------|-----------|------------|-------|------|-------|------------|
| | | V_{GE} [V] | V_{CE} [V] | I_C [A] | T_j [°C] | Min | Typ | Max | |
| Rated resistance | R | | | | 25 | | 10 | | k Ω |
| Deviation of R_{100} | $\Delta_{R/R}$ | $R_{100} = 853 \Omega$ | | | 100 | -12,4 | | +12,4 | % |
| Power dissipation | P | | | | 25 | | 210 | | mW |
| Power dissipation constant | | | | | 25 | | 3,5 | | mW/K |
| B-value | $B_{(25/50)}$ | Tol. $\pm 3\%$ | | | 25 | | 3590 | | K |
| B-value | $B_{(25/100)}$ | Tol. $\pm 3\%$ | | | 25 | | 3650 | | K |
| Vincotech NTC Reference | | | | | | | | H | |

| Temp. [°C] | R Nom [Ω] | R Min [Ω] | R Max [Ω] |
|------------|--------------------|--------------------|--------------------|
| -40 | 245040 | 207570 | 282500 |
| -35 | 182010 | 155980 | 208040 |
| -30 | 136570 | 118330 | 154820 |
| -25 | 103470 | 90590 | 116350 |
| -20 | 79114 | 69954 | 88274 |
| -15 | 61019 | 54465 | 67573 |
| -10 | 47454 | 42740 | 52169 |
| -5 | 37198 | 33791 | 40605 |
| 0 | 29380 | 26908 | 31851 |
| 5 | 23372 | 21575 | 25170 |
| 10 | 18722 | 17412 | 20032 |
| 15 | 15096 | 14141 | 16051 |
| 20 | 12249 | 11554 | 12945 |
| 25 | 10000 | 9500 | 10500 |
| 30 | 8211,1 | 7746,7 | 8675,5 |
| 35 | 6779,8 | 6356,6 | 7203 |
| 40 | 5627,9 | 5244,7 | 6011,1 |
| 45 | 4695,8 | 4350,2 | 5041,3 |
| 50 | 3937,4 | 3626,7 | 4248,1 |
| 55 | 3317,1 | 3038,2 | 3596 |
| 60 | 2807,3 | 2557,2 | 3057,4 |
| 65 | 2386,3 | 2162,1 | 2610,5 |
| 70 | 2037 | 1836 | 2238 |
| 75 | 1745,9 | 1565,6 | 1926,1 |
| 80 | 1502,2 | 1340,4 | 1664 |
| 85 | 1297,5 | 1152,1 | 1442,8 |
| 90 | 1124,7 | 993,98 | 1255,4 |
| 95 | 978,38 | 860,65 | 1096,1 |
| 100 | 853,96 | 747,8 | 960,12 |
| 105 | 747,81 | 651,94 | 843,67 |
| 110 | 656,91 | 570,22 | 743,61 |
| 115 | 578,83 | 500,31 | 657,35 |
| 120 | 511,53 | 440,3 | 582,76 |
| 125 | 453,35 | 388,63 | 518,06 |

figure 1. Thermistor

Typical NTC characteristic as a function of temperature

$$R = f(T)$$

